

IN THE CLAIMS

Please cancel claims 35-123 without prejudice or disclaimer of the subject matter recited therein;

Please amend claim 1; and

Please add new claims 124-135 as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A disposable fuel cell system comprising:
a fuel cell comprising at least one variable volume chamber;
a cartridge comprising at least one variable volume chamber; and
a valve system which at least one of regulates, controls and prevents fluid flow between the cartridge and fuel cell,
wherein the fuel cell is non-refillable after use,
wherein the cartridge and fuel cell are separate devices in an uninstalled state, and
wherein a transfer of contents of the at least one variable volume chamber of the cartridge to the least one variable volume chamber of the fuel cell occurs automatically when the cartridge is connected to the fuel cell.

2. (Original) The system of claim 1, wherein the at least one variable volume chamber of the fuel cell comprises a flexible fuel chamber.

3. (Original) The system of claim 1, further comprising an electrolyte chamber having a defined volume.

4. (Original) The system of claim 1, further comprising an electrolyte chamber.

5. (Original) The system of claim 1, wherein the at least one variable volume chamber of the cartridge comprises a flexible fuel chamber.

6. (Original) The system of claim 1, wherein the at least one variable volume chamber of the cartridge comprises a flexible fuel chamber and a flexible electrolyte chamber.

7. (Original) The system of claim 1, wherein the at least one variable volume chamber of the fuel cell comprises a flexible wall having folds.

8. (Original) The system of claim 1, wherein the at least one variable volume chamber of the cartridge comprises a flexible wall having folds.

9. (Original) The system of claim 1, wherein the at least one variable volume chamber of the fuel cell comprises a flexible expandable and contractable chamber.

10. (Original) The system of claim 1, wherein the at least one variable volume chamber of the cartridge comprises a flexible expandable and contractable chamber.

11. (Original) The system of claim 1, wherein the cartridge is non-removably connected to the fuel cell.

12. (Original) The system of claim 11, wherein the cartridge is non-removably connected to the fuel cell by a sliding connection.

13. (Original) The system of claim 11, wherein the cartridge is non-removably connected to the fuel cell by a sliding cradle connection.

14. (Original) The system of claim 11, wherein the cartridge is non-removably connected to the fuel cell by an abutting connection.

15. (Original) The system of claim 11, wherein the cartridge is non-removably connected to the fuel cell by a rotational sliding connection.

16. (Original) The system of claim 1, wherein the fuel cell further comprises a front cover, a rear cover, a mounting frame, an anode assembly, a cathode assembly, a cathode protection device, and a frame rim.

17. (Original) The system of claim 16, wherein the at least one variable volume chamber of the fuel cell comprises a flexible wall having folds and a peripheral rim secured to the anode assembly.

18. (Original) The system of claim 16, wherein the cathode protection device comprises a cathode protection net.

19. (Original) The system of claim 16, wherein the anode assembly and the cathode assembly are mounted to the mounting frame and wherein a volume defined by the mounting frame, the anode assembly and the cathode assembly forms an electrolyte chamber.

20. (Original) The system of claim 16, wherein the at least one variable volume chamber of the fuel cell comprises a flexible wall having folds and a peripheral rim secured to the anode assembly and wherein a volume defined by the flexible wall and the anode assembly forms the at least one variable volume chamber of the fuel cell.

21. (Original) The system of claim 1, wherein the cartridge further comprises a front cover and a rear cover.

22. (Original) The system of claim 21, wherein the at least one variable volume chamber of the cartridge is disposed between the front cover and the rear cover.

23. (Original) The system of claim 1, wherein the at least one variable volume chamber of the cartridge comprises a backing and a flexible wall having folds and a peripheral portion secured to the backing.

24. (Original) The system of claim 23, wherein the backing comprises a plate.

25. (Original) The system of claim 1, wherein the at least one variable volume chamber of the cartridge comprises a variable volume fuel chamber and a variable volume electrolyte chamber, and further comprising fuel arranged within the variable volume fuel chamber and electrolyte arranged within the variable volume electrolyte chamber.

26. (Original) The system of claim 1, wherein the at least one variable volume chamber of the fuel cell comprises a variable volume fuel chamber, and wherein the fuel cell further comprises an electrolyte chamber, fuel arranged within the variable volume fuel chamber, and electrolyte arranged within the electrolyte chamber.

27. (Original) The system of claim 1, wherein the valve system comprises a first part which is coupled to and/or associated with the fuel cell and a second part which is coupled to and/or associated with the cartridge.

28. (Original) The system of claim 27, wherein the second part is insertable into the first part.

29. (Original) The system of claim 27, wherein the second part is non-releasably connectable to the first part.

30. (Original) The system of claim 27, wherein, when the second part is not connected from the first part, the first part prevents fluid from exiting out of the fuel cell and the second part prevents fluid from exiting out of the cartridge.

31. (Original) The system of claim 27, wherein, when the second part is not connected from the first part, the first part prevents fluid from leaking out of the fuel cell and the second part prevents fluid from leaking out of the cartridge.

32. (Original) The system of claim 1, wherein the valve system comprises a closed position and an opened position.

33. (Original) The system of claim 1, wherein the valve system comprises a plurality of exit ports which are in fluid communication with the fuel cell.

34. (Original) The system of claim 1, wherein the fuel cell and cartridge each comprise a generally rectangular shape.

Claims 35-123 (Canceled).

124. (New) The system of claim 1, wherein after the cartridge is connected to the fuel cell, at least one of:

the cartridge is prevented from being disconnected from the fuel cell; and

the fuel cell is prevented from being refilled.

125. (New) The system of claim 1, wherein the valve system comprises a fuel cell valve which is coupled to and/or associated with the fuel cell and a cartridge valve which is coupled to and/or associated with the cartridge.

126. (New) The system of claim 125, wherein, after the fuel cell valve and the cartridge valve is connected to each other, the fuel cell is prevented from being refilled.

127. (New) The system of claim 125, wherein the fuel cell valve is non-releasably connectable to the cartridge valve.

128. (New) The system of claim 125, wherein, when the cartridge valve is not connected from the fuel cell valve, the cartridge valve prevents fluid from exiting out of the cartridge.

129. (New) A disposable fuel cell system comprising:

a fuel cell comprising at least one variable volume chamber;

a cartridge comprising at least one variable volume chamber; and

a valve system which at least one of regulates, controls and prevents fluid flow between the cartridge and fuel cell,

wherein a transfer of contents of the at least one variable volume chamber of the cartridge to the least one variable volume chamber of the fuel cell occurs automatically when the cartridge is slidably inserted into a portion of the fuel cell and non-removably connected to the fuel cell.

130. (New) The system of claim 129, wherein the fuel cell is non-refillable after use.

131. (New) The system of claim 129, wherein the cartridge and fuel cell are separate devices in an uninstalled state.

132. (New) A disposable fuel cell system comprising:

a fuel cell comprising at least one variable volume chamber;

a cartridge comprising at least one variable volume chamber; and

a valve system which at least one of regulates, controls and prevents fluid flow between the cartridge and fuel cell,

wherein a transfer of contents of the at least one variable volume chamber of the cartridge to the least one variable volume chamber of the fuel cell occurs automatically upon the cartridge being connected to the fuel cell.

133. (New) The system of claim 132, wherein the fuel cell is rendered non-refillable after use by virtue of the cartridge and the fuel cell being non-removably connected to each other.

134. (New) The system of claim 132, wherein the cartridge and fuel cell are separate devices in an uninstalled state.

135. (New) The system of claim 132, wherein a transfer of contents of the at least one variable volume chamber of the cartridge to the least one variable volume chamber of the fuel cell occurs automatically when the cartridge is slidably inserted into a portion of the fuel cell and non-removably connected to the fuel cell.